

Japanese Utility Model No. Hei 6[1994]-63027

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PAPER DIAPER WITH HEALTH TEST DETECTION PAPER

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[There are no amendments to this design.]

Abstract

Purpose

Partially colored and water-absorbent paper strips of different lengths for detecting the amount of urination and amount of protein or sugar are temporarily and partially bonded to a portion at the bottom of a paper diaper to measure the amount of urination and amount of protein or sugar.

Configuration

The paper diaper is made of high-density water-absorbent paper, and the detection paper strips are made of water-absorbent paper.

Claim

1. A paper diaper with health test detection paper having partially colored and water-absorbent paper strips for detecting the amount of urination and amount of protein or sugar which is bonded partially and temporarily at the left and right sides at the bottom.

Brief explanation of figures

Figure 1 is a drawing showing an inner plan view of a diaper.

Figure 2 is a drawing showing an outer plan view of a diaper.

Figure 3 is a drawing showing a perspective view of a diaper.

Figure 4 is a drawing showing the practical application [of the product].

Explanation of the symbols

- 1,2,3: paper for detecting amount of urination
 4: paper for detecting amount of protein or sugar
 5, 6, 7, 8: colored portions of detection paper
 9: absorbent portion
 10, 11: stopper [transliteration] portion
 12, 13: stopper bonding portion
 14: left leg elastic portion
 15: right leg elastic portion
 16: abdominal elastic portion
 17: rear elastic portion

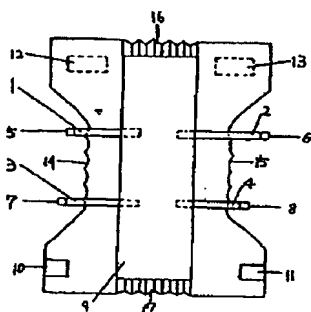


Figure 1

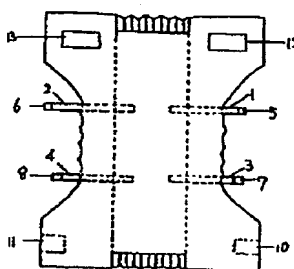


Figure 2

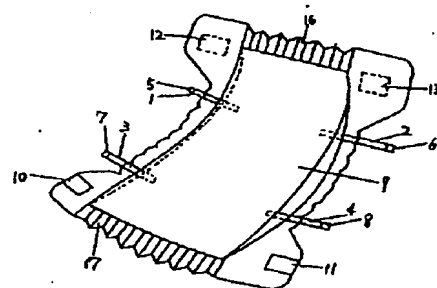


Figure 3

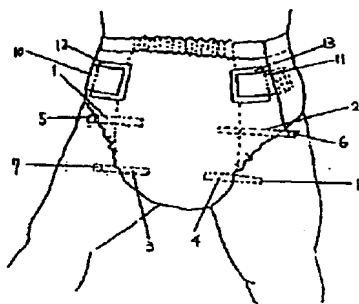


Figure 4

Detailed explanation of the design

[0001]

Industrial application field

This utility model pertains to a paper diaper for babies and the bedridden elderly in which [diaper] detection paper is temporarily bonded, and the amount of urination and amount of protein or sugar can be measured by pulling out the detection paper strips.

[0002]

Prior art

The previous paper diapers served only the functions of holding urine and stool discharged without any leak for an extended period of time and providing for the permeation of air.

[0003]

Problems to be solved by the design

In those previous paper diapers, there is a crucial problem that the amount of urination cannot be detected from the outside unless the diaper attached to the body is felt by hand to see if it must be changed.

[0004]

This utility model enables one to determine whether a paper diaper on a baby or a bedridden elderly person must be changed instantaneously by pulling out a partially bonded paper strip that detects the amount of urination.

[0005]

Furthermore, this utility model contains a protein- or sugar-detecting paper, and the results may be used to judge the state of [the wearer's] health.

[0006]

Means to solve the problems

To accomplish the above objective, the paper diaper of this utility model has paper strips for detecting the amount of urination and the amount of protein or sugar at the four corners of the absorbent portion, which is the portion covering the groin when the diaper is used, and the strips are temporarily bonded such that each can be pulled out.

[0007]

The outer portions of the detection paper strips are partially colored in various colors, enabling one to distinguish easily the paper strip for detecting the amount of urination from that for detecting the amount of protein or sugar.

[0008]

The length of the urination detection paper can be variable, with the longest strip extended farthest out, enabling one to determine the amount of urination in steps.

Action

In a paper diaper configured as described above, the amount of urination and amount of protein or sugar can be determined without directly touching the diaper by pulling out the paper

strips for detecting the amount of urination and the amount of protein or sugar; thus, it is sanitary.

[0009]

Application example

An application example is explained by referring to the figures as follows. In Figure 1, a front elastic portion (16) is set on the abdominal side, a rear elastic portion (17) is set on the back side, an absorbent portion (9) is placed against the groin, and stopper portions (10) and (11) with a temporary bonding glue are attached to outer stopper portions (12) and (13), respectively.

[0010]

The left and right leg portions on Figure 1 are elastic portions (14) and (15), which enable one to attach the paper diaper smoothly to the body.

[0011]

In Figure 1, paper strips (1), (2) and (3) for detecting the amount of urination, which have different lengths and in which colored portions (5), (6) and (7) are the same color, are temporarily bonded to the absorbent portion, enabling one to monitor the amount of urination gradually.

[0012]

Paper strip (4) in Figure 1 has a colored portion (8) with a color different from that of the paper strips for detecting the amount of urination, and it is easily distinguishable from the others.

[0013]

After the paper diaper is attached, the paper strips for detecting the amount of urination are pulled out at [various] time intervals in order to use them as a yardstick for changing the diaper.

[0014]

Effects

This utility model is configured as described above, and consequently, there are the following effects.

[0015]

Both kinds of paper detection strips are temporarily bonded to the absorbent portion of the paper diaper and can be pulled out. Therefore, the strips for detecting the amount of urination enable one to determine the amount of urination gradually without directly touching the paper diaper and thus to determine the timing of a diaper change easily and sanitarily.

[0016]

The paper protein- or sugar-detection strip enables one to monitor the condition of bedridden elderly persons, etc., having a critical role in monitoring the condition of their health.

[0017]

Both kinds of the detection strips are made of paper, and thus provide no foreign sensation to the skin and are essentially safe. Therefore, it can be used for babies and bedridden elderly persons without concern.